What is Claimed is:

1.   A method of performing clear operations in a region having a subregion,

        comprising:

performing an initialization routine responsive to a first clear command, wherein the

        initialization routine comprises eliminating stale information from all pixels

        outside the subregion; and

responsive to a subsequent clear command:

        updating a current clear count for the region; and

        writing the updated current clear count into clear count values associated with

                all pixels outside the subregion.

2.   The method of claim 1, wherein the initialization routing further comprises:

ensuring that clear count values associated with all pixels inside and outside the

        subregion are the same; and

writing a predetermined value into all pixels inside the subregion.

3.   The method of claim 1, wherein the initialization routine further comprises:

updating the current clear count for the region; and

writing the updated current clear count into the clear count values associated with all

        pixels outside the subregion.

4.   The method of claim 1, wherein the pixels correspond to an image buffer.

5.   The method of claim 1, wherein the pixels correspond to a z buffer.

6.   The method of claim 1, wherein:

the method is performed using a fast clear computer graphics system in which a predetermined color value is displayed in lieu of a pixel color value for pixels whose associated clear count value does not equal the current clear count; and

the predetermined color value is the same as a background color outside the subregion.

7.   The method of claim 1, wherein:

the method is performed using a fast clear computer graphics system in which a predetermined color value is displayed in lieu of a pixel color value for pixels whose associated clear count value does not equal the current clear count; and

the predetermined color value is not the same as a background color outside the subregion.

8.   The method of claim 1, wherein the subregion is a scissor region.

9.   The method of claim 1, wherein the subregion is a viewport.

10.   The method of claim 1, further comprising:

dividing an area outside the subregion into at least one rectangular subarea; and

wherein writing the updated current clear count into the clear count values associated with all pixels outside the subregion comprises executing an area fill operation on the at least one rectangular subarea.

11.   The method of claim 1, further comprising:

dividing an area outside the subregion into at least one rectangular subarea; and

wherein eliminating stale information from all pixels outside the subregion comprises

executing a block transfer operation on the at least one rectangular subarea,

wherein a source region and a destination region for the block transfer

operation both correspond to the at least one rectangular subarea.

12.   The method of claim 1, further comprising:

employing a first striping technique in the subregion.

13.   The method of claim 12, further comprising:

employing a second striping technique in the region prior to creation of the subregion;

wherein the first and second striping techniques are the same striping techniques; and

wherein stripe definitions used for striping in the subregion are the same as those that

were created and used for striping in the region prior to creation of the

subregion.

14.   The method of claim 12, further comprising:

employing a second striping technique in the region prior to creation of the subregion;

wherein the first and second striping techniques are the same striping techniques; and

wherein stripe definitions used for striping in the subregion are not the same as those

that were created and used for striping in the region prior to creation of the

subregion.

15.   A method of performing clear operations in a region having a subregion, comprising:

prior to creation of the subregion, responding to clear commands according to a fast clear technique wherein a current clear count for the region is updated responsive to each clear command;

responsive to a first clear command after creation of the subregion:

performing an initialization routine comprising eliminating stale information from all pixels outside the subregion; and

responsive to a subsequent clear command after creation of the subregion:

updating the current clear count for the region; and

writing the updated current clear count into the clear count values associated with all pixels outside the subregion.

16.   The method of claim 15, further comprising:

discontinuing the subregion; and

resuming responding to clear commands according to the fast clear technique.

17.   The method of claim 16, wherein:

the fast clear technique used prior to creation of the subregion is a striping technique; and

wherein stripe definitions for the striping technique are not changed in the resuming step.

18.   The method of claim 15, wherein the initialization routing further comprises:

ensuring that clear count values associated with all pixels inside and outside the subregion are the same; and

writing a predetermined value into all pixels inside the subregion.

19.   The method of claim 15, wherein the initialization routine further comprises:

updating the current clear count for the region; and

writing the updated current clear count into the clear count values associated with all

pixels outside the subregion.

20.   The method of claim 15, wherein the pixels correspond to an image buffer.

21.   The method of claim 15, wherein the pixels correspond to a z buffer.

22.   The method of claim 15, wherein:

the method is performed using a fast clear computer graphics system in which a

predetermined color value is displayed in lieu of a pixel color value for pixels

whose associated clear count value does not equal the current clear count; and

the predetermined color value is the same as a background color outside the

subregion.

23.   The method of claim 15, wherein:

the method is performed using a fast clear computer graphics system in which a

predetermined color value is displayed in lieu of a pixel color value for pixels

whose associated clear count value does not equal the current clear count; and

the predetermined color value is not the same as a background color outside the

subregion.

24.   The method of claim 15, wherein the subregion is a scissor region.

25.   The method of claim 15, wherein the subregion is a viewport.

26.   The method of claim 15, further comprising:

dividing an area outside the subregion into at least one rectangular subarea; and

wherein writing the updated current clear count into the clear count values associated

    with all pixels outside the subregion comprises executing an area fill operation

    on the at least one rectangular subarea.

27.   The method of claim 15, further comprising:

dividing an area outside the subregion into at least one rectangular subarea; and

wherein eliminating stale information from all pixels outside the subregion comprises

    executing a block transfer operation on the at least one rectangular subarea,

    wherein a source region and a destination region for the block transfer

    operation both correspond to the at least one rectangular subarea.

28.   The method of claim 15, further comprising:

employing a first striping technique in the subregion.

29.   The method of claim 28, further comprising:

employing a second striping technique in the region prior to creation of the subregion;

wherein the first and second striping techniques are the same striping techniques; and

wherein stripe definitions used for striping in the subregion are the same as those that

    were created and used for striping in the region prior to creation of the

    subregion.

30.   The method of claim 28, further comprising:

employing a second striping technique in the region prior to creation of the subregion;

wherein the first and second striping techniques are the same striping techniques; and

wherein stripe definitions used for striping in the subregion are not the same as those that were created and used for striping in the region prior to creation of the subregion.

31.   A method of performing clear operations in a region having a subregion, comprising:

determining the percentage area of the region occupied by the subregion; and

if the percentage area is higher than a predetermined threshold percentage, responding to clear commands by:

performing an initialization routine responsive to a first clear command, wherein the initialization routine comprises eliminating stale information from all pixels outside the subregion; and

responsive to a subsequent clear command:

updating a current clear count for the region; and

writing the updated current clear count into clear count values associated with all pixels outside the subregion.

32.   The method of claim 31, wherein the predetermined threshold percentage is about 75%.

33.   The method of claim 31, wherein the predetermined threshold percentage is about 70%.

34.   The method of claim 31, wherein the initialization routing further comprises:

ensuring that clear count values associated with all pixels inside and outside the subregion are the same; and

writing a predetermined value into all pixels inside the subregion.

35.   The method of claim 31, wherein the initialization routine further comprises:

updating the current clear count for the region; and

writing the updated current clear count into the clear count values associated with all

pixels outside the subregion.

36.   The method of claim 31, wherein the pixels correspond to an image buffer.

37.   The method of claim 31, wherein the pixels correspond to a z buffer.

38.   The method of claim 31, wherein:

the method is performed using a fast clear computer graphics system in which a

predetermined color value is displayed in lieu of a pixel color value for pixels

whose associated clear count value does not equal the current clear count; and

the predetermined color value is the same as a background color outside the

subregion.

39.   The method of claim 31, wherein:

the method is performed using a fast clear computer graphics system in which a

predetermined color value is displayed in lieu of a pixel color value for pixels

whose associated clear count value does not equal the current clear count; and

the predetermined color value is not the same as a background color outside the

subregion.

40.   The method of claim 31, wherein the subregion is a scissor region.

41.   The method of claim 31, wherein the subregion is a viewport.

42.   The method of claim 31, further comprising:

dividing an area outside the subregion into at least one rectangular subarea; and

wherein writing the updated current clear count into the clear count values associated with all pixels outside the subregion comprises executing an area fill operation on the at least one rectangular subarea.

43.   The method of claim 31, further comprising:

dividing an area outside the subregion into at least one rectangular subarea; and

wherein eliminating stale information from all pixels outside the subregion comprises executing a block transfer operation on the at least one rectangular subarea, wherein a source region and a destination region for the block transfer operation both correspond to the at least one rectangular subarea.

44.   The method of claim 31, further comprising:

employing a first striping technique in the subregion.

45.   The method of claim 31, further comprising:

employing a second striping technique in the region prior to creation of the subregion;

wherein the first and second striping techniques are the same striping techniques; and

wherein stripe definitions used for striping in the subregion are the same as those that were created and used for striping in the region prior to creation of the subregion.

46.   The method of claim 31, further comprising:

employing a second striping technique in the region prior to creation of the subregion;

wherein the first and second striping techniques are the same striping techniques; and

wherein stripe definitions used for striping in the subregion are not the same as those that were created and used for striping in the region prior to creation of the subregion.

47.   Computer program code embodied in a machine-readable storage or transmission medium that, when executed on a computer, causes the computer to perform a method of performing clear operations in a region having a subregion, comprising:

performing an initialization routine responsive to a first clear command, wherein the initialization routine comprises eliminating stale information from all pixels outside the subregion; and

responsive to a subsequent clear command:

updating a current clear count for the region; and

writing the updated current clear count into clear count values associated with all pixels outside the subregion.

48.   Computer program code embodied in a machine-readable storage or transmission medium that, when executed on a computer, causes the computer to perform a method of performing clear operations in a region having a subregion, comprising:

prior to creation of the subregion, responding to clear commands according to a fast clear technique wherein a current clear count for the region is updated responsive to each clear command;

responsive to a first clear command after creation of the subregion:

     performing an initialization routine comprising eliminating stale information from all pixels outside the subregion; and

responsive to a subsequent clear command after creation of the subregion:

     updating the current clear count for the region; and

     writing the updated current clear count into the clear count values associated with all pixels outside the subregion.

49.   The computer program code of claim 48, wherein the method further comprises:

discontinuing the subregion; and

resuming responding to clear commands according to the fast clear technique.

50. Computer program code embodied in a machine-readable storage or transmission medium that, when executed on a computer, causes the computer to perform a method of performing clear operations in a region having a subregion, comprising:

determining the percentage area of the region occupied by the subregion; and

if the percentage area is higher than a predetermined threshold percentage, responding to clear commands by:

performing an initialization routine responsive to a first clear command, wherein the initialization routine comprises eliminating stale information from all pixels outside the subregion; and

responsive to a subsequent clear command:

updating a current clear count for the region; and

writing the updated current clear count into clear count values associated with all pixels outside the subregion.

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